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TRANSMITTAL FORM

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Total Number of Pages in This Submission

Application Number 09/810,310

Filing Date March 14, 2001

First Named Inventor Khleif, Samir N.

Group Art Unit 1644

Examiner Name M. Dibrino

Attorney Docket Number 015280-415100US

ENCLOSURES (check all that apply)					
Fee Transmittal Form		Assignment Papers (for an Application)		After Allowance Communication to Group	
Fee Attached		☐ Drawing(s)		Appeal Communication to Board of Appeals and Interferences	
Amendment / Reply		Licensing-related Papers		Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)	
After Final		Petition		☐ Proprietary Information	
Affidavits/declaration(s)		Petition to Convert to a Provisional Application		Status Letter	
Extension of Time Request		Power of Attorney, Revocation Change of Correspondence Address		Other Enclosure(s) (please identify below):	
Express Abandonment Request		☐ Terminal Disclaimer ☐ Request for Refund		Form PTO-1449; References: AA-DC; Return Postcard	
Information Disclosure Statement		CD, Number of	CD(s)		
Certified Copy of Priority Document(s)		Remarks	The Commissioner is authorized to charge any additional fees to Deposit Account 20-1430.		
Response to Missing Parts/ Incomplete Application			J		
Response to Missing Parts under 37 CFR 1.52 or 1.53					
SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT					
Firm	Townsend and Townsend and Crew LLP				
and Individual name	Brian W. Poor Reg. No. 32,928				
Signature	Brin W. Por				
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PATENT Attorney Docket No. 015280-415100US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of:

Samir Khleif et al.

Application No.: 09/810,310

Filed: March 14, 2001

For: METHODS AND COMPOSITIONS

FOR CO-STIMULATION OF IMMUNOLOGICAL RESPONSES

TO PEPTIDE ANTIGENS

Examiner:

M. Dibrino

Art Unit:

1644

INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents Washington, D.C. 20231

Dear Sir:

Applicants direct the Examiner's attention to the references below, also listed on the accompanying Form PTO-1449. A copy of each is also enclosed.

The following U.S. Patents are set forth below by issue date.

AA. U.S. Patent No. 4,599,230, issued on July 8, 1986 to Milich et al.

AB. U.S. Patent No. 4,599,231, issued on July 8, 1986 to Milich et al.

AC. U.S. Patent No. 5,861,310, issued on January 19, 1999 to Freeman et al.

AD. U.S. Patent No. 5,866,553, issued on February 2, 1999 to Donnelly et al.

AE. U.S. Patent No. 5,942,607, issued on August 24, 1999 to Freeman et al.

The following foreign patent publications are set forth by approximate publication

date:

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Page 2

The following articles are set forth in alphabetical order:

- AG. Acsadi et al., "Human dystrophin expression in mdx mice after intramuscular injection of DNA constructs," Nature 352:815-818 (1991)
- AH. Aichele et al., "Antiviral cytotoxic T cell response induced by in vivo priming with a free synthetic peptide," J. Exp. Med. 171:1815-1820 (1990)
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- AS. Chen et al., "Costimulation of antitumor immunity by the B7 counterreceptor for the T lymphocyte molecules CD28 and CTLA-4," Cell 71:1093-1102 (1992)
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- CV. Townsend et al., "Antigen recognition by class I-restricted T lymphocytes," Ann. Rev. Immunol. 7:601-624 (1989)
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It is respectfully requested that the cited information be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

Applicants believe that their invention as claimed is patentable over the above references taken alone or in any combination. However, Applicants reserve the right to demonstrate that their claimed invention was made prior to any one or more of the above-identified references. No inference should be drawn as to the pertinence of the references based on the order in which they are presented.

Applicants respectfully request that the Examiner review the foregoing references to make her own determination of the patentability of the present invention and that the references be made of record in the file of this application.

This Information Disclosure Statement is being filed after the mailing date of the first Office Action and after three months of the filing date, but prior to the Notice of Allowance or Final Office Action.

CERTIFICATION

I hereby certify that no item of information in the information disclosure statement filed herewith was cited in a communication from a foreign patent office in a counterpart foreign application or, to my knowledge after making reasonable inquiry, was known to any individual designated in Section 1.56(c) more than three months prior to the filing of this information disclosure statement.

Samir Khleif et al.

Application No.: 09/810,310

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PATENT

Although no fee is believed to be due, the Commissioner is hereby authorized to charge any fees necessitated by this transmittal to Townsend and Townsend Deposit Account No. 20-1430.

Respectfully submitted,

Dated:

Bv:

Brian W. Poor Reg. No. 32,928

TOWNSEND and TOWNSEND and CREW LLP

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San Francisco, CA 94111 Tel.: (206) 467-9600

Fax: (415) 576-0300



449 (Modified)		A 44 D 1 A 3/2 01	6200 A16100TTC	A 11	
		Attorney Docket No.: 015280-415100US Application No.: 09/810,310			
ENTS AND PUBL		Applicant: Samir Khleif et al.			
		Filing Date: March 14, 2001		Group: 1644	
ignation	1	J.S. PATENT DOCUMENTS Page			Page 1 of 1
Document No.	Date	Name	Class	Sub-class	Filing Date (If Appropriate)
. 4,599,230	July 8, 1986	Milich et al.			
. 4,599,231	July 8, 1986	Milich et al.			
5,861,310	Jan.19, 1999	Freeman et al.			
5,866,553	Feb. 2, 1999	Donnelly et al.			
. 5,942,607	Aug. 24, 1999	Freeman et al.			
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Document No.	Date	Country	Class	Sub-class	Translation (Yes/No)
90/11092	Oct. 4, 1990	wo			
07	THER ART (Incl	uding Author, Title, Date,	Pertinent Pages, E	tc.)	
	Acsadi et al., "Human dystrophin expression in mdx mice after intramuscular injection of DNA constructs," Nature 352:815-818 (1991)				
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Armitage <i>et al.</i> (1992)	Armitage et al., "Molecular and biological characterization of a murine ligand for CD40," Nature 357:80-82				
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<u>BEST AVAILAB</u>LE CÔPY Attorney Docket No.: 015280-415100ÚS Application No.: 09/810,310 FORM PTO-1449 (Modified) LIST OF PATENTS AND PUBLICATIONS FOR Applicant: Samir Khleif et al. APPLICANT'S INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary) Group: 1644 Filing Date: March 14, 2001 Dustin et al., "Correlation of CD2 binding and functional properties of multimeric and monomeric lymphocyte function-associated antigen 3," J. Exp. Med. 169:503-517 (1989) Eisenlohr et al., "A transfert transfection system for identifying biosynthesized proteins processed and presented Wis 10 BE to class I MHC restricted T lymphocytes," J. Immunol. Meth. 154:131-138 (1992) Elliott et al.. "Perspectives on the role of MHC antigens in normal and malignant cell development," Adv. Cancer Res. 53:181-245 (1989) ELIPE TRU Fearon et al., "Interleukin-2 production by tumor cells bypasses T helper function in the generation of an antitumor AX. response," Cell 60:397-403 (1990) Freeman et al., "Structure, expression, and T cell costimulatory activity of the murine homologue of the human B AY. lymphocyte activation antigen B7," J. Exp. Med. 174:625-631 (1991) Fynan et al., "DNA vaccines: protective immunizations by parenteral, mucosal, and gene-gun inoculations," Proc. AZ. Natl. Acad. Sci. USA 90:11478-11482 (1993) Gansbacher et al., "Interleukin 2 gene transfer into tumor cells abrogates tumorigenicity and induces protective BA. immunity," J. Exp. Med. 172:1217-1224 (1990) Germain, R., "The ins and outs of antigen processing and presentation," Nature 322:687-691 (1986) BB. Gimmi et al., "B-cell surface antigen B7 provides a costimulatory signal that induces T cells to proliferate and BC. secrete interleukin 2," Proc. Natl. Acad. Sci. USA 88:6575-6579 (1991) Gimmi et al., "Human T-cell clonal anergy is induced by antigen presentation in the absence of B7 costimulation," BD. Proc. Natl. Acad. Sci. USA 90:6586-6590 (1993) Golumbek et al., "Treatment of established renal cancer by tumor cells engineered to secrete interleukin-4," BE. Science 254:713-716 (1991) Greenberg, P. D., "Adoptive T cell therapy of tumors: mechanisms operative in the recognition and elimination of BF. tumor cells," Adv. Immunol. 49:281-355 (1991) Harding et al., "CD28-mediated signalling co-stimulates murine T cells and prevents induction of anergy in T-cell BG. clones," Nature 356:607-609 (1992) Hart et al., "Priming of anti-human immunodeficiency virus (HIV) CD8+ cytotoxic T cells in vivo by carrier-free BH. HIV synthetic peptides," Proc. Natl. Acad. Sci. USA 88:9448-9452 (1991) Harty et al., "CD8⁺ T cells specific for a single nonamer epitope of Listeria moncytogenes are protective in vivo," BI. J. Exp. Med. 175:1531-1538 (1992) Hellström and Hellström, in The Biologic Therapy of Cancer, pp. 35-52, Devita et al., eds., Philadelphia, J. B. BJ. Lippincott Co. (1991) Hunt et al., "Peptides presented to the immune system by the murine class II major histocompatibility complex BK. molecule 1-A^d," Science 256:1817-1820 (1992) BL. Janeway, C.A., Jr., "Approaching the asymptote? Evolution and revolution in immunology," Cold Spring Harbor Symp. Quant. Biol. 54:1-13 (1989) Jenkins et al., "Allogeneic non-T spleen cells restore the responsiveness of normal T cell clones stimulated with BM. antigen and chemically modified antigen-presenting cells," J. Immunol. 140:3324-3330 (1988) June et al., "Role of the CD28 receptor in T-cell activation," Immunol. Today 11:211-216 (1990) BN. Kast et al., "Protection against lethal Sendai virus infection by in vivo priming of virus-specific cytotoxic T BO. lymphocytes with a free synthetic peptide," Proc. Natl. Acad. Sci. USA 88:2283-2287 (1991) Kotovuori et al., "ICAM-2 and a peptide from its binding domain are efficient activators of leukocyte adhesion BP. and integrin affinity," J. Immunol. 162:6613-6620 (1999) Koulova et al., "The CD28 ligand B7/BB1 provides costimulatory signal for alloactivation of CD4⁺ T cells," J. BQ. Exp. Med. 173:759-762 (1991)

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FORM PTO-1449 (Modified)		9 (Modified)	Attorney Docket No.: 015280-415100ÚS	Application No.: 09/810,310		
LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)			Applicant: Samir Khleif et al.			
			Filing Date: March 14, 2001	Group: 1644		
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	P	Ley et al., "Interleukin 2-depende Immunol. 21:851-854 (1991)	ent activation of tumor-specific cytotoxic T lym	phocytes in vivo," Eur. J.		
THAN	BW.	Linsley et al., "T-cell antigen CD28 mediates adhesion with B cells by interacting with activation antigen B7/BB-1," Proc. Natl. Acad. Sci. USA 87:5031-5035 (1990)				
	BX.	Linsley et al., Binding of the B cell activation antigen B7 to CD28 costimulates T cell proliferation and interleuking 2 mRNA accumulation," J. Exp. Med. 173:721-730 (1991)				
BY.		Liu et al., "Heat-stable antigen is a costimulatory molecule for CD4 T cell growth," J. Exp. Med. 175:437-445 (1992)				
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